

NOMENCLATURE OF THE VIRGINIA-BLUEBELL, *MERTENSIA VIRGINICA* (BORAGINACEAE)¹

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ABSTRACT

Mertensia virginica (L.) Pers. ex Link is the correct name for the Virginia-bluebell. It should not be replaced by *M. pulmonarioides* Roth.

RESUMEN

Mertensia virginica (L.) Pers. ex Link es el nombre correcto para la especie usualmente así conocida. No debe reemplazarse por *M. pulmonarioides* Roth.

Virginia-bluebell or Virginia-cowslip, *Mertensia virginica* (L.) Pers. ex Link, is native to eastern North America and widely cultivated as an ornamental perennial. It has consistently been called *M. virginica* in floras covering its natural range, including all editions of *Gray's Manual of Botany* (Gray 1848, 1856, 1862, 1863, 1867; Gray et al. 1890; Robinson & Fernald 1908; Fernald 1950) and continuing to the most recent state and provincial floras and checklists. That name was accepted in Williams's (1937) monograph on *Mertensia* in North America and in Al-Shehbaz's (1991) monograph on the Boraginaceae of the southeastern United States. It is also the accepted name in horticultural references including *Hortus III* (Staff...1976), the most recent edition of *The Royal Horticultural Society Dictionary of Gardening* (Huxley et al. 1992), *The Plant-Book* (Mabberly 1997), and *The European Garden Flora* (Richardson 2000).

In recent years, nevertheless, this species has with increasing frequency been called *M. pulmonarioides* Roth in horticultural literature and in seed and nursery catalogues. All or most post-1990 use of the name *M. pulmonarioides* is probably derived directly or indirectly from *Index Hortensis* (Treharne 1989), which is an exception among standard references in that the name *M. pulmonarioides* is accepted and *M. virginica* is listed as a synonym. Following the publication of *Index Hortensis*, the name *M. pulmonarioides* was accepted in the 1997 edition of *The American Horticultural Society A-Z Encyclopedia of Garden Plants* (Brickell & Zuk 1997) with *M. virginica* as a synonym. The name *M. pulmonarioides* was also accepted in the 1998/99 edition of the *RHS Plant Finder* (Lord et al. 1998), although in the 2003/04 edition (Lord et al. 2003) *M.*

¹ Contribution No. 118 from the Royal Botanical Gardens, Hamilton, Ontario, Canada.

virginica is the accepted name and *M. pulmonarioides* is cross-indexed as a synonym. Schmid (2002), in *An Encyclopedia of Shade Perennials*, commented that with taxonomists having "switched" the long-established name *M. virginica* to *M. pulmonarioides*, the latter name would "show up more and more often."

Nomenclatural matters are not discussed in *Index Hortensis*, and the name *M. virginica* was used in the literature cited for the species. The name *M. pulmonarioides* may have been taken from the original component of *Index Kewensis* (Jackson 1894), in which *M. pulmonarioides* was listed as an accepted name and *M. virginica* as a synonym. No taxonomic publication that specifically discusses the nomenclature of Virginia-bluebell was cited in the extensive bibliography compiled by Al-Shehbaz (1991) or in *The Kew Record of Taxonomic Literature Relating to Vascular Plants* or any of the other bibliographies I consulted. In view of the confusion now associated with the nomenclature of this species, it seems appropriate to present such a study here.

Virginia-bluebell was named and described at the rank of species by Linnaeus (1753) in the first edition of *Species Plantarum*, as *Pulmonaria virginica*. Two specimens are relevant to the typification of this name. One, designated the type by Williams (1937) and accepted as such by Charles E. Jarvis in the Linnaean Plant Names Typification Project (M. Grant, pers. comm.), is from Linnaeus's own herbarium (LINN) and was collected in North America by Pehr Kalm. It bears the Sprague Catalogue number 184.5. From a photograph in the library of the Arnold Arboretum, this specimen is unequivocally identifiable as Virginia-bluebell.

Linnaeus cited an earlier description from Gronovius's (1739) *Flora Virginica*, which had been based on a manuscript by John Clayton. The specimen Clayton 339, now in the herbarium of the Natural History Museum (London) (BM), is from Gronovius's herbarium. According to data on the herbarium sheet, it was taken from a plant sent from Virginia to England by Mark Catesby and subsequently cultivated in the garden of Peter Collinson. An image can be seen on the museum's web site, with the designation "Linnaean type status: original element." Its identity as Virginia-bluebell is likewise unmistakable.

The genus *Mertensia* was segregated from *Pulmonaria* in 1797 by A.W. Roth, who gave Virginia-bluebell the new name *M. pulmonarioides*. Roth did not mention the name *P. virginica* L. and may not have been aware that he had described the same species. The name *M. pulmonarioides* should therefore be considered a heterotypic synonym. *Pulmonaria virginica* L., with the species epithet *virginica* retained, was transferred to *Mertensia* in 1829 by J.H.F. Link, who cited *M. pulmonarioides* Roth as a synonym. Link attributed the combination *M. virginica* to Persoon, probably on the basis of herbarium annotations or correspondence, as there is no record of Persoon's actually having published the binomial. The authorship of the binomial may therefore be cited as "(L.) Pers. ex Link" or simply as "(L.) Link." The combination is occasionally attrib-

uted to Persoon, following Fernald (1950) or Gleason and Cronquist (1991), who routinely omitted the name of the publishing author in such contexts, but under current rules of nomenclature that is incorrect.

The binomial *M. pulmonarioides* Roth was published before *M. virginica* (L.) Pers. ex Link, but as long as the taxonomic rank is not changed, priority is based on the date of publication of the species epithet rather than on that of the binomial. Adoption of the earliest available species epithet is retroactively required under Articles 11.4 and 52 of the *International Code of Botanical Nomenclature*, 2000 ed. (Greuter et al. 2000). In this case, the earliest available epithet for the species described by Linnaeus is *virginica*, the priority of which dates from 1753, the starting point of botanical nomenclature.

During the interval 1797-1829 three homonyms of the genus name *Mertensia* were published: *Mertensia* Willd. for a genus of ferns; *Mertensia* Thunb. ex Roth for a genus of red algae; and *Mertensia* Kunth for a genus of Ulmaceae. These illegitimate homonyms were used only briefly and by few authors. A search of Broun's (1938) *Index to North American Ferns* and the Internet resources AlgaeBase and The International Plant Names Index (websites) indicated that the species epithet *virginica* was not used under any of those homonymic genus names. Nor did the IPNI or any other index disclose any pre-1829 use of the combination *M. virginica* for any other species in the boraginaceous genus.

In summary.—The traditional use of the name *M. virginica* is compatible with its typification. The epithet *virginica* in this context has priority from the starting point of botanical nomenclature, 1753, whereas that of *pulmonarioides* is from 1797. The binomial *M. virginica* (L.) Pers. ex Link is not a homonym of a name previously used for any other species. The familiar name *Mertensia virginica* (L.) Pers. ex Link is the correct name for the Virginia-bluebell; it should not be replaced by *M. pulmonarioides* Roth.

ACKNOWLEDGMENTS

I am grateful to Mike Grant and W. George Schmid for very helpful correspondence, and to my colleague Dennis Eveleigh for useful information and valued suggestions. I am also grateful to the staff of the Gray Herbarium/Arnold Arboretum Library for access to historic literature and a photograph of the Linnaean herbarium specimen. Crinan Alexander and Guy Nesom are thanked for reviewing the manuscript.

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